Cellular Immunology

AN INTERNATIONAL JOURNAL

EDITOR-IN-CHIEF: H. Sherwood Lawrence

Volume 145, 1992

ACADEMIC PRESS, INC.
Harcourt Brace Jovanovich, Publishers
San Diego New York Boston
London Sydney Tokyo Toronto

Copyright © 1992 by Academic Press, Inc.
All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (27 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1992 articles are as shown on the article title pages; if no fee code appears on the title page, the copy fee is the same as for current articles.

0008-8749/92 $5.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

Contents of Volume 145

NUMBER 1, NOVEMBER 1992

M. VITALE, L. ZAMAI, L. M. NERI, A. GALANZI, A. FACCHINI, R. RANA, A. CATALDI, AND S. PAPA. The Impairment of Natural Killer Function in the Healthy Aged Is Due to a Postbinding Deficient Mechanism 1

JONATHAN M. GREEN, LAURENCE A. TURKA, CARL H. JUNE, AND CRAIG B. THOMPSON. CD28 and Staphylococcal Enterotoxins Synergize to Induce MHC-Independent T-Cell Proliferation 11

RICHARD M. MCCARRON. IL-1-Induced Prostacyclin Production by Cerebral Vascular Endothelial Cells Inhibits Myelin Basic Protein-Specific Lymphocyte Proliferation 21

GLENNDA SMITHSON, R. MICHAEL WOLCOTT, AND ROBERT CHERVENAK. Tight Conjugate Formation Is Not Always Required for Natural Killer Cell-Mediated Lysis 30

LOUIS A. ROSENTHAL, KAREN K. KLYCZEK, AND KENNETH J. BLANK. Introduction of the *H-2D*^{k} Gene into a Class I-Negative Tumor Cell Line Confers Interferon-γ Inducibility upon the Silent Endogenous *H-2K*^{k} Gene 43

INGEBORG MEIJER, ANGELINA J. M. BOOT, GIETA MAHABIR, ALT ZANTEMA, AND ALEX J. VAN DER EB. Reduced Binding Activity of Transcription Factor NF-κB Accounts for MHC Class I Repression in Adenovirus Type 12 E1-Transformed Cells 56

GYÖRGY STUBER, JAVIER AVILA-CARIÑO, AND EVA KLEIN. Generation of Cytotoxicity with Various MHC Class I Restrictions against Autologous LCL by Stimulating the Lymphocytes with Autologous and/or Allogeneic LCLs Sharing HLA Alleles with the Responder 66

MASANORI TSUCHIDA, TSUNEO IIAI, HISAMI WATANABE, AND TORU ABO. Relative Resistance of Intermediate TCR Cells to Anti-CD3 mAb in Mice *in Vivo* and Their Partial Functional Characterization 78

DIANE M. DIXON, ROY D. LEGRAND, AND MICHAEL L. MISFELDT. Selective Activation of Murine V_β8.2 Bearing T Cells by *Pseudomonas* Exotoxin A 91

ROMAN DZIARSKI. Synergistic Enhancement of T Cell Responses and Interleukin-1 Receptor Expression by Interleukin-1 and Heparin or Dextran Sulfate 100

YOSHIHIRO TORIMOTO, NAM H. DANG, MICHEL STREULI, DAVID M. ROTHSTEIN, HARUO SAITO, STUART F. SCHLOSSMAN, AND CHIKAO MORIMOTO. Activation of T Cells through a T Cell-Specific Epitope of CD45 111

WILLIAM OFOSU-APPIAH AND CHRISTINE RUGGIERO. Abnormal Activation and Loss of Suppressor T Cells in the Spontaneously Hypertensive Rat 130

HARRY M. LANDER, DANIEL M. LEVINE, AND ABRAHAM NOVOGRODSKY. Stress Stimuli-Induced Lymphocyte Activation 146

TOVA FRANCUS, PATRICIA M. ROMANO, GINGER MANZO, LUZ FONACIER, NANCY ARANGO C., AND PAUL SZABO. IL-1, IL-6, and PDGF mRNA Expression in Alveolar Cells Following Stimulation with a Tobacco-Derived Antigen 156

H. ZOLA, L. FLEGO, P. J. MACARDLE, P. J. DONOHOE, J. RANFORD, AND D. ROBERTON. The CD45RO (p180, UCHL1) Marker: Complexity of Expression in Peripheral Blood 175

NICHOLAS M. VALIANTE, MANTHRASALAM RENGARAJU, AND GIORGIO TRINCHIERI. Role of the Production of Natural Killer Cell Stimulatory Factor (NKSF/IL-12) in the Ability of B Cell Lines to Stimulate T and NK Cell Proliferation 187

SHORT COMMUNICATIONS

PIO CONTI, MARIA R. PANARA, RENATO C. BARBACANE, FERNANDA C. PLACIDO, MAURO BONGRAZIO, MARCELLA REALE, ROY A. DEMPSEY, AND STEFANO FIORE. Blocking the Interleukin-1 Receptor Inhibits Leukotriene B4 and Prostaglandin E2 Generation in Human Monocyte Cultures 199

C. PIERI, F. MORONI, AND R. RECCHIONI. Glutathione Influences the Proliferation as Well as the Extent of Mitochondrial Activation in Rat Splenocytes 210

ANNOUNCEMENT 218

PAPERS TO APPEAR IN FORTHCOMING ISSUES 219

JOSEPH W. K. CHU AND FRANCES J. SHAROM. Glycophorin A Interacts with Interleukin-2 and Inhibits Interleukin-2-Dependent T-Lymphocyte Proliferation 223

HRISHEKESH R. CHAKKALATH AND LAWRENCE K. L. JUNG. Augmentation of Phorbol Ester-Induced T Cell Proliferation by Agents Which Raise Intracellular Cyclic Adenosine Monophosphate 240

HARRY E. PRINCE, JOANNE YORK, AND ERIC R. JENSEN. Phenotypic Comparison of the Three Populations of Human Lymphocytes Defined by CD45RO and CD45RA Expression 254

DEMING SUN, KRISTEN BRANUM, AND QIHUA SUN. Prevention of Experimental Autoimmune Encephalomyelitis in Lewis Rats by Treatment with an Anti-Rat CD5 Antibody (OX19) 263

SHUNSEI HIROHATA. Role of CD11a/CD18-CD54 Interactions in Suppression of Human B Cell Responsiveness by $CD4^+$ Suppressor T Cells 272

P. MOREL, C. VINCENT, J. WIJDENES, AND J. P. REVILLARD. Down-Regulation of Cell Surface CD4 Molecule Expression Induced by Anti-CD4 Antibodies in Human T Lymphocytes 287

HITOSHI OHMORI, NAOKI HASE, MASAKI HIKIDA, TOSHIYUKI TAKAI, AND NORIAKI ENDO. Enhancement of Antigen-Induced Interleukin 4 and IgE Production by Specific IgG_1 in Murine Lymphocytes 299

TRANG T. DUONG, FRED D. FINKELMAN, AND GILL H. STREJAN. Effect of Interferon-γ on Myelin Basic Protein-Specific T Cell Line Proliferation in Response to Antigen-Pulsed Accessory Cells 311

PAUL G. COMBER, VICKY LENTZ, AND ALAN D. SCHREIBER. Modulation of the Transcriptional Rate of Fcγ Receptor mRNA in Human Mononuclear Phagocytes 324

AMY YELLEN-SHAW AND JOHN G. MONROE. Differential Responsiveness of Immature- and Mature-Stage Murine B Cells to Anti-IgM Reflects Both FcR-Dependent and -Independent Mechanisms 339

RYO KIMURA, HUI HU, AND JOAN STEIN-STREILEIN. Immunological Tolerance to Hapten Prevents Subsequent Induction of Hapten-Immune Pulmonary Interstitial Fibrosis (HIPIF) 351

JEFFREY M. MCCORMACK, STEVEN C. MOORE, JANET W. GATEWOOD, AND WILLIAM S. WALKER. Mouse Splenic Macrophage Cell Lines with Different Antigen-Presenting Activities for $CD4^+$ Helper T Cell Subsets and Allogeneic $CD8^+$ T Cells 359

SHORT COMMUNICATION

LU-ANN M. POZZI AND WEISHUI Y. WEISER. Human Recombinant Migration Inhibitory Factor Activates Human Macrophages to Kill Tumor Cells 372

PAPERS TO APPEAR IN FORTHCOMING ISSUES 380

AUTHOR INDEX FOR VOLUME 145 383

CUMULATIVE SUBJECT INDEX FOR VOLUMES 139–145 385

INFORMATION FOR AUTHORS

Cellular Immunology will provide an international medium devoted exclusively to publication of original investigations concerned with the immunological activities of cells in experimental or clinical situations. The scope of the journal will encompass the broad area of *in vitro* and *in vivo* studies of cellular immune responses. These include, for example, delayed type hypersensitivity or cellular immunity; immunologic surveillance and tumor immunity; transplantation immunology; autoimmunity, resistance to intracellular microbial and viral infection; immunologic deficiency states and their reconstitution; antigen receptor sites; thymus and lymphocyte immunobiology, etc. The chief criteria for acceptance of papers submitted for publication are the originality, clarity, and quality of the work reported. Manuscripts are accepted for review with the understanding that the same work has not been and will not be nor is presently submitted elsewhere, and that its submission for publication has been approved by all of the authors and by the institution where the work was carried out; further, that any person cited as a source of personal communications has approved such citation. Written authorization may be required at the Editor's discretion. Articles and any other material published in *Cellular Immunology* represent the opinions of the author(s) and should not be construed to reflect the opinions of the Editor(s) and the Publisher.

Authors submitting a manuscript do so on the understanding that if it is accepted for publication, copyright in the article, including the right to reproduce the article in all forms and media, shall be assigned exclusively to the Publisher. The Publisher will not refuse any reasonable request by the author for permission to reproduce any of his or her contributions to the journal.

All manuscripts should be submitted to the Editor: Dr. H. Sherwood Lawrence, Infectious Disease and Immunology Division, Department of Medicine, New York University Medical Center, 550 First Avenue, New York, New York 10016.

Form. Manuscripts should be typewritten and double-spaced throughout (including tables, footnotes, references, and figure captions); the original typescript should be prepared on one side of a good grade of 8½ × 11-inch white paper, with 1-inch margins on all sides. Mimeographed or duplicated manuscripts will be accepted *if they are indistinguishable from good typed copies*. Submit three complete copies in order to expedite processing of the manuscript. Each copy *must* include all figures and tables.

Number the pages consecutively. *Page 1* should contain the article title, author(s), and affiliation(s); at the bottom of the page type a short running head title not exceeding 45 characters (including spaces), and the name and complete mailing address (including zip code) of the person to whom proofs should be sent. *Page 2* should contain a short abstract, approximately 100 to 150 words in length.

Headings. The organization of the paper must be clearly indicated by appropriate headings and subheadings.

Abbreviations. Do not use final periods after abbreviations of measure (cm, sec, kg, etc.) in text or in tables, except for "in." (inch). Use the American Chemical Society *Style Guide,* 1986, as a reference.

Symbols. Underline letters that represent mathematical symbols; these will be set in *italic* type.

Equations. Number equations consecutively, with the number placed in brackets to the extreme right of the equation. Refer to equations as Eq. [3] or simply [3], except at the beginning of a sentence, when the word Equation should be spelled out. Punctuate equations to conform to their place in the syntax of the sentence.

Footnotes. Use only when absolutely necessary, in which case type the footnotes consecutively, double-spaced, on a separate sheet of paper in the order of their appearance in the text. Use superscript Arabic numbers [1,2], etc. in the text citations and in the list.

Tables. Number tables consecutively with Arabic numerals in order of their appearance in the text. Type each table, double-spaced throughout on a separate sheet; avoid vertical rules. Supply a short descriptive title below the table number. Type table footnotes, lettered [a,b], etc. at the end of the table.

Figures. Number figures consecutively in the text with Arabic numerals. Type legends double-spaced together on a separate sheet. Original illustrations no larger than 8½ × 11 inches are preferred. All illustrations should be in finished form suitable for reproduction. They should be planned to fit the proportion of the printed page (5 × 8 in.). Lettering on drawings should be of professional quality or generated by *high-resolution* computer graphics and should be large enough (10–12 points) to take a reduction of 50–60%. Drawings should be made with black India ink on tracing linen, smooth surface white paper, or Bristol board. Alternatively, *high-quality* computer graphics may be acceptable. Graphs should be plotted with black India ink on light blue or white coordinate paper with coordinates properly labeled; grid lines that are to show should be inked in black. Photographs should be submitted as glossy prints (5 × 7 or 8 × 10 inches) and not marred by staples, paper clips, or pencil marks. Groupings of photographs should be indicated; if mounting is necessary, use 10- to 12-point *flexible* board.

Illustrations in color can be accepted only if the authors defray the cost.

References. These should be cited in the text by a number in parentheses and listed at the end of the paper in numerical order. Note the following style for book and journal citations:

1. Leopardi, E., and Rosenau, W., *Cell. Immunol.* **83,** 73, 1984.
2. Buckley, R. H., *In* "Monoclonal Antibodies: Probes for the Study of Autoimmunity and Immunodeficiency" (B. F. Haynes and G. S. Eisenbarth, Eds.), pp. 83–95. Academic Press, Orlando, FL, 1983.
3. Katz, D. H., "Lymphocyte Differentiation, Recognition, and Regulation." Academic Press, New York, 1977.

Abbreviations of journal names should follow the style of *Chemical Abstracts Service Source Index,* 1985. Unpublished observations and personal communications should be cited in the text as such, and should not be included in the reference list.

Letters to the Editor relating to articles appearing in *Cellular Immunology* are welcome and will be published, if found suitable, as limited space permits. All letters must be typewritten in the format of other material submitted for publication and limited in length to two typewritten pages.

Author's alterations in excess of 10% of the cost of composition will be charged to the author.

Reprints. 50 reprints will be supplied free of charge. Additional reprints can be ordered on the form accompanying the proof.

Personal computer disks. Manuscripts may be submitted to *Cellular Immunology* on personal computer disks after the manuscript has been accepted and after all revisions have been incorporated onto the disk. Label the disk with the type of computer used, the type of software and the version number, and the disk format. All tabular material will be typeset conventionally. Art must be prepared as camera-ready copy; see the section on Figures earlier in this Information for Authors.

A hard copy printout of the manuscript that exactly matches the disk file must be supplied. Academic Press will not accept disks without accompanying printouts of all files on the disk. File names must clearly indicate the content of each file. The manuscript will be edited according to the style of the journal, and the proofs must be read carefully by the author. Disks that are not translatable or economical to process will not be used. The publisher reserves the right not to use the disk.

For further information on preparing disks for typesetting conversion, please contact the publisher (Editorial Supervisor, Journal Division, Academic Press, Inc., 1250 Sixth Avenue, San Diego, California 92101; telephone: (619) 699-6415; fax: (619) 699-6800).